

Microwave Update 2004  
Harvey Hotel  
Dallas, Texas  
October 14, 15, 16, 2004

## Technical Program

### Thursday Oct 14

- 8:00 AM Surplus tour begins from hotel parking lot with tour guides and maps. Arrive back at hotel by 5 PM or so  
Coordinator – Kent Britain WA5VJB
- 7:00 to 8:00 PM Registration – WA5JAT, AF8Z, WA5TKU, W5LUA – near Trinity IV conference room
- 8:00 PM till Midnite Down East Microwave Hospitality Suite

### Friday Oct 15

- Morning session Trinity IV Conference Room
- 7:30 to 9:00 AM Registration in hallway near meeting room Trinity IV – WA5JAT and AF8Z
- 8:00 AM to Noon Demonstration of Software Defined Radios developed by FlexRadio Systems demonstrated by Bob McGwier N4HY
- 8:00 AM to Noon Noise Figure / Spectrum Analyzer / Network Analyzer / Phase Noise Test Equipment Workshop WA8RJF, W5LUA, WW2R, N2CEI, WA5YWC
- 8:00 AM to Noon Reflock Workshop by K0VXM, WA5TKU, WW2R, N5PYK
- 8:00 AM to Noon Antenna Gain Measurements from 902 MHz to 47 GHz by Kent Britain WA5VJB – Parking lot behind hotel
- Afternoon Session Moderator - Chuck Clark AF8Z
- 1:00 to 1:05 PM Welcome by Al Ward W5LUA and Bob Gormley WA5YWC and Kent Britain WA5VJB
- 1:05 to 1:45 PM Microwaving in the UK by Peter Day G3PHO

- 1:45 to 2:30 PM ARRL Forum to discuss the regulatory environment as it applies to the microwave bands by Joel Harrison W5ZN, Dave Sumner K1ZZ and Chris Imlay W3KD
- 2:30 to 2:45 PM Break
- 2:45 to 3:15 PM Joining the fun on 1296 EME by Jay Liebman K5JL  
3:15 to 3:45 PM Building beam lead diode multipliers for 80 and 120 GHz by Will Jensby W0EOM
- 3:45 to 4:30PM Millimeter-wave LO references & phase noise considerations by Brian Justin WA1ZMS
- 4:30 to 5:15 PM SSETI Express satellite mode S data and voice transmitter by Sam Jewell G4DDK
- 5:15 to 7:00 PM Dinner break
- 7:00 PM to Midnite Fleamarket and Bullsession
- 9:00 PM to Midnite North Texas Microwave Society & Roadrunner Microwave Group Hospitality Suite

### **Saturday Oct 16**

- Morning Session Moderator – Bob Gormley WA5YWC
- 7:30 to 9:00 AM Registration in hallway near meeting room Trinity IV – WA5JAT and WA5TKU
- 8:00 to 8:30 AM Building and using the DSP-10 as a microwave IF by Dave Robinson WW2R
- 8:30 to 9:00 AM Using WR-28 waveguide at 47 GHz by Barry Malowanchuk VE4MA
- 9:00 to 9:45 AM Writing code for DDS and PLL chips for microwave synthesizers by John Miles KE5FX
- 9:45 to 10:00 AM Break
- 10:00 to 10:30 AM A 10 GHz linear translator by Gary Lauterbach AD6FP  
10:30 to 11:00 AM Introduction to 802.11 HSMM (High Speed Multi Media) by John Beadles N5OOM
- 11:00 to 11:30 AM Multi-band microwave operation at K4TO by Dave Sublette K4TO
- 11:30 to Noon Experiences with the CT1DMK reflock board by Wes Atchison WA5TKU
- Noon to 1:00 PM Lunch break

Afternoon Session

Moderator – Craig Young KA5BOU

- 1:00 to 1:30 PM Contest operation at K8GP by Gene Zimmerman W3ZZ  
1:30 to 2:15 PM Multiple- Reflector dishes and feeds by Paul Wade W1GHZ  
2:15 to 3:00 PM Tropospheric enhancement VHF and Up by Joe Jurecka  
N5PYK
- 3:00 to 3:30 PM Break and Auction by Kent Britain WA5VJB
- 3:30 to 4:00 PM Update on microwave capabilities of AMSAT's newest and  
future satellites by Keith Pugh W5IU
- 4:00 to 4:30 PM Extra-terrestrial LASER communication by Paul Perryman  
WA5WCP
- 4:30 to 5:00 PM Microwave and Millimeter-wave DX Standings by Al Ward  
W5LUA
- 6:00 to 8:00 PM Cash Bar
- 7:00 to 10:00 PM Banquet – Prize Drawing

Al Ward W5LUA  
September 7, 2004